

Claims

1. Disposable, sterilizable unit for sampling, reacting and measuring, comprising:

- a body of plastic material including a reaction chamber in which a filter is provided for the collection of microbes present in a fluid whose possible microbiologic pollution must be measured;
- an optically transparent and liquid tight element , moveable with respect to said body and capable of enclosing said reaction chamber, or exposing it to a liquid or gas flow to be tested;
- one or more deformable tanks containing suitable measurement reagents;
- a deformable tank intended to contain discharge liquids;
all said tanks being individually connected to the reaction chamber by means of a network of microchannels provided in the unit body in order to guarantee the tightness of the unit against possible spilling out of liquids.

2. Disposable, sterilizable unit for sampling, reacting and measuring, comprising:

- a body of plastic material including a reaction chamber in communication with a pierceable and tight re-sealable septum which can be accessed from outside by means of a syringe;
- an optically transparent and liquid tight element enclosing the reaction chamber;
- one or more deformable tanks containing appropriate reagents for measurement;
- a deformable tank intended to contain discharge liquids;
all said tanks being individually connected to the reaction chamber by means of a network of micro-channels provided in the unit body in order to guarantee tightness of the unit against possible spilling out of liquids.

3. Unit according to claim 1, in which said optically transparent and liquid tight element is characterized by transparence on one side only.

4. Unit according to claim 2, in which said optically transparent and liquid tight element is characterized by transparence on one side only.

5. Unit according to claim 1, in which said optically transparent and liquid tight element is characterized by transparence on two sides.

6. Unit according to claim 2 , in which said optically transparent and liquid tight

element is characterized by transparence on two sides.

7. Unit according to claim 1, wherein the deformable tanks are in part delimited by a deformable membrane and can be emptied by a mechanical compression carried out on the external part of said membrane.

5 8. Unit according to claim 2, wherein the deformable tanks are in part delimited by a deformable membrane and can be emptied by a mechanical compression carried out on the external part of said membrane.

9. Unit according to claim 1, wherein the discharge tank may be filled by a simple hydraulic pressure produced by the filling of the reaction chamber by the reagents displaced from the deformable tanks.

10. Unit according to claim 2, wherein the discharge tank may be filled by a simple hydraulic pressure produced by the filling of the reaction chamber by the reagents displaced from the deformable tanks.

11. Unit according to claim 1, in which the capacity of the reaction chamber is from 20 up to 1000 microliters.

12. Unit according to claim 2, in which the capacity of the reaction chamber is from 20 up to 1000 microliters